

in a manner dependent upon the values of the first and second signals," which are representative of pressures at the inlet of the valve body. There is no indication in the first passage that Haines selects a target valve stem position or adjusts a valve stem position until a position of the valve stem matches the target valve stem position, as required by claim 1. The second passage merely states that the controller may adjust a valve plug position to change a flow rate based on a calculation of a flow rate for gas. Thus, once again, Haines is not describing or suggesting that a target valve stem position may be selected or that the valve stem position may be adjusted until the valve stem position matches the target valve stem position, as required by claim 1.

Moreover, Haines teaches away from the adjustment recited in claim 1. In another passage, Haines explains that the calculated flow rate is used "to provide an indication to the controller as to which direction the valve plug must be moved to change the flow rate and thus bring it closer to a predetermined desired flow rate value." See Haines at col. 7, lines 58-64 (emphasis added). Because Haines merely describes providing an indication of a direction in which to move the valve plug, Haines' controller is unable to match the valve plug position to a target valve plug position.

For at least these reasons, claim 1 is allowable over Haines.

The claims depending from claim 1 are allowable for at least the reasons that claim 1 is allowable and for containing allowable subject matter in their own right. For example, claim 2 recites that the target valve stem position may be determined by calculating a flow area of the valve flow modulating member and determining a valve stem position corresponding to the calculated flow area. Haines does not describe or suggest calculating a flow area of a valve flow modulating member or determining a valve stem position corresponding to the calculated flow area. As another example, claim 5 recites that calculation of the flow area includes modelling flow rate through the valve flow modulating member to determine a relationship between a function of fluid pressure upstream and downstream from the valve flow modulating member, the flow area of the valve flow modulating member, and the flow rate through the valve flow

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modulating member. Again, Haines does not describe or suggest modelling flow rate through a valve flow modulating member to determine these relationships.

Applicant asks that all claims be allowed. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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